

Response dated: December 21, 2009  
App. No. 10/658,651; Filed: September 9, 2003  
Response to Office Action of June 19, 2009

### **REMARKS**

Claims 1-46 were pending in this application. By this response, claims 1, 30-32 have been amended. Claims 2-26, 29, and 35-38 have been canceled. As a result of a previous restriction requirement, claims 39-46 have been withdrawn. Cancellation or amendment of the claims is not to be considered a dedication to the public of any subject matter.

Thus, claims 1, 27, 28, and 30-34 are currently under consideration. Reconsideration of these claims is requested in view of the amendments and the following remarks.

### **INFORMATION DISCLOSURE STATEMENTS**

Applicants note that references submitted in Information Disclosure Statements dated 9/9/2003, 11/3/2004, 11/4/2004, 3/8/2005, 6/20/2005, 8/24/2005, and 7/28/2006 have not been acknowledged. It is respectfully requested that these references be considered and the PTO Forms 1449 initialed and returned with the next Action.

### **CLAIM REJECTIONS UNDER 35 U.S.C. § 112**

#### **Claims 2-26**

Claims 2-26 currently stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have canceled claims 2-26 with this amendment, rendering the rejection moot.

### **CLAIM REJECTIONS UNDER 35 U.S.C. § 102(b) or 103(a)**

#### **Claims 1-38**

Claims 1-38 currently stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over any of U.S. 5,314,486 to Zang et al. ("Zang"), U.S. 4,693,722 to William H. Wall ("Wall"), U.S. 4,778,472 to Homsy et al. ("Homsy"), and U.S. 4,917,701 to Douglas H. Morgan ("Morgan"). Applicants note that the Office Action lists the rejection as being over U.S. 4,633,722 to Wall. However, 4,633,722

belongs to Beardmore et al. and relates to a "Gyroscope apparatus". Applicants presume that the Examiner instead meant that claims 1-38 are rejected under U.S. 4,693,722 to William H. Wall.

Independent claim 1 currently recites, in part, a spinal prosthesis system, comprising a caudal prosthesis having a pair of pedicle anchors for coupling to an inferior vertebral body, the caudal prosthesis including an artificial caudal facet joint structure comprising a pair of caudal bearing surfaces, a cephalad prosthesis having a second pair of pedicle anchors for coupling to a superior vertebral body, the cephalad prosthesis including an artificial cephalad facet joint structure comprising a pair of cephalad bearing surfaces, and an artificial facet joint formed between the adjoining vertebral bodies by articulation of the artificial caudal facet joint structure with the artificial cephalad facet joint structure.

Zang discloses a prosthetic replacement device for a metatarso-phalangeal joint. The Zang prosthetic includes a convex bearing surface having a stem configured to be received in the resected metatarsal bony shaft, and a concave bearing surface having a stem configured to be received within the resected phalangeal bony shaft.

Zang does not anticipate claim 1 as Zang does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Zang does not disclose (1) a caudal prosthesis having a pair of pedicle anchors for coupling to an inferior vertebral body, (2) an artificial caudal facet joint structure comprising a pair of caudal bearing surfaces, (3) a cephalad prosthesis having a second pair of pedicle anchors for coupling to a superior vertebral body, (4) an artificial cephalad facet joint structure comprising a pair of cephalad bearing surfaces, and (5) an artificial facet joint formed between the adjoining vertebral bodies by articulation of the artificial caudal facet joint structure with the artificial cephalad facet joint structure. In Zang, the concave and convex bearing surfaces are each received in the metatarsal and phalangeal bony shafts, respectively, by a single stem. The convex and concave surfaces form a single joint. In contrast, the spinal prosthesis of claim 1 includes a pair of pedicle anchors coupling each of the caudal and cephalad prosthesis to their respective vertebral bodies. Furthermore, the spinal prosthesis of claim 1 includes an artificial facet joint formed between the adjacent vertebral bodies by the articulation of the caudal bearing surfaces of the caudal prosthesis with the

cephalad bearing surfaces of the cephalad prosthesis. Zang clearly does not disclose the structure of claim 1.

Wall discloses a prosthetic device for a temporomandibular joint. The Wall prosthetic includes a pair of plates that are clamped about the ramus of the mandible, and a convex bearing surface that receives one of the plates to form a condyle.

Wall does not anticipate claim 1 as Wall does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Wall does not disclose (1) a caudal prosthesis having a pair of pedicle anchors for coupling to an inferior vertebral body, (2) an artificial caudal facet joint structure comprising a pair of caudal bearing surfaces, (3) a cephalad prosthesis having a second pair of pedicle anchors for coupling to a superior vertebral body, (4) an artificial cephalad facet joint structure comprising a pair of cephalad bearing surfaces, and (5) an artificial facet joint formed between the adjoining vertebral bodies by articulation of the artificial caudal facet joint structure with the artificial cephalad facet joint structure. In Wall, the plates are clamped about the ramus of the mandible, and a convex bearing surface receives one of the plates to form a single joint. In contrast, the spinal prosthesis of claim 1 includes a pair of pedicle anchors coupling each of the caudal and cephalad prosthesis to their respective vertebral bodies. Furthermore, the spinal prosthesis of claim 1 includes an artificial facet joint formed between the adjacent vertebral bodies by the articulation of the caudal bearing surfaces of the caudal prosthesis with the cephalad bearing surfaces of the cephalad prosthesis. Wall clearly does not disclose the structure of claim 1.

Homsy discloses a prosthetic device for a temporomandibular joint. The Homsey prosthetic includes a first part which replaces the natural glenoid fossa and articular eminence of a natural TM joint, and a second part which replaces the natural condylar head.

Homsy does not anticipate claim 1 as Homsey does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Homsey does not disclose (1) a caudal prosthesis having a pair of pedicle anchors for coupling to an inferior vertebral body, (2) an artificial caudal facet joint structure comprising a pair of caudal bearing surfaces, (3) a cephalad prosthesis having a second pair of pedicle anchors for coupling to a superior vertebral body, (4) an artificial cephalad facet joint structure comprising a pair of cephalad bearing

surfaces, and (5) an artificial facet joint formed between the adjoining vertebral bodies by articulation of the artificial caudal facet joint structure with the artificial cephalad facet joint structure. In Homsy, the first and second parts articulate to form a single joint. In contrast, the spinal prosthesis of claim 1 includes a pair of pedicle anchors coupling each of the caudal and cephalad prosthesis to their respective vertebral bodies. Furthermore, the spinal prosthesis of claim 1 includes an artificial facet joint formed between the adjacent vertebral bodies by the articulation of the caudal bearing surfaces of the caudal prosthesis with the cephalad bearing surfaces of the cephalad prosthesis. Homsy clearly does not disclose the structure of claim 1.

Morgan discloses a prosthetic device for a temporomandibular joint. The Morgan prosthetic is similar to the Wall prosthetic in that it includes a plate that is formed to the ramus of the mandible, and an artificial condyle.

Morgan does not anticipate claim 1 as Morgan does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Morgan does not disclose (1) a caudal prosthesis having a pair of pedicle anchors for coupling to an inferior vertebral body, (2) an artificial caudal facet joint structure comprising a pair of caudal bearing surfaces, (3) a cephalad prosthesis having a second pair of pedicle anchors for coupling to a superior vertebral body, (4) an artificial cephalad facet joint structure comprising a pair of cephalad bearing surfaces, and (5) an artificial facet joint formed between the adjoining vertebral bodies by articulation of the artificial caudal facet joint structure with the artificial cephalad facet joint structure. In Morgan, the plate formed to the ramus of the mandible articulates with the artificial condyle to form a single joint. In contrast, the spinal prosthesis of claim 1 includes a pair of pedicle anchors coupling each of the caudal and cephalad prosthesis to their respective vertebral bodies. Furthermore, the spinal prosthesis of claim 1 includes an artificial facet joint formed between the adjacent vertebral bodies by the articulation of the caudal bearing surfaces of the caudal prosthesis with the cephalad bearing surfaces of the cephalad prosthesis. Morgan clearly does not disclose the structure of claim 1.

As such, Zang, Wall, Homsy, and Morgan do not disclose, either expressly or inherently, each and every claim limitation of independent claim 1. Claims 27, 28, and 30-34 depend from claim 1 and are not anticipated by Zang, Wall, Homsy, and Morgan for at least the same reasons

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set forth above. Applicants respectfully request the rejections to claims 1, 27, 28, and 30-34 be withdrawn.

### CONCLUSION

In light of the remarks set forth above, Applicants respectfully request the Examiner expedite the prosecution of this patent application to issuance. If it is determined that a telephone conference would aid in the prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 287-2163.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-4050 referencing docket no. 10002-701.410. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Date: 12/21/09

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